

a flip mobile phone is formed so that a user can put his/her ear close to the audio output port **22** and his/her mouth close to the audio input port **13** to receive and deliver signals like a mobile phone. In addition, the user can longitudinally hold the handheld electronic data processing device of the invention with the second keypad **12** facing his or her sight line to receive calls or dial phone numbers. The display screen **21** can display messages indicating the mobile phone operation condition, such as the calling phone number or the dialing phone number, the short message service, and the like.

[0030] Third mode: referring to **FIGS. 6A, 6D** and **6E**, the second body **20** is initially turned about the second rotational axis **B1** to be lifted relative to the first body **10**; it is then swiveled about the third rotational axis **B2** to switch the two surfaces of the second body **20** and fold over the first body **10** with the display screen **21** facing outside to become a PDA. The display screen **21** can receive input from a stylus to execute operation. As the touch control mode does not require the first and second keypads **11** and **12**, they are covered and hidden by the second body **20** to avoid unconsciously hitting and erroneous operation. The first body **10** and the second body **20** are folded to a thickness and size to be held in the palm.

[0031] Although the three operation modes set forth above are available individually on the present mobile phone, PDA or PDA phone or smart phone, they do not coexist simultaneously in one mobile phone, PDA or PDA phone or smart phone. The invention, by coupling the first body **10** and the second body **20** with the hinge seat **40**, enables the second body **20** to be swiveled about three rotational axes relative to the first body **10**, hence enabling the handheld electronic data processing device to be equipped with a plurality of operation modes.

What is claimed is:

1. A handheld electronic data processing device, comprising:

a first body which has a first hinge on one side thereof;

a hinge seat which has a second hinge on one side, and which is coupled with the first body through the first hinge to be rotatable about a rotational axis relative to the first body thereof; and

a second body which has a display screen on one surface and which is coupled with the hinge seat through the second hinge to allow the second body to be swiveled relative to the hinge seat about two rotational axes;

whereby the hinge seat is rotatable relative to the first body about a rotational axis, and the second body being swiveled indirectly relative to the first body about three rotational axes to selectively move the display screen facing or opposing the first body and folding over the first body, or move different lateral sides of the second body coupling with the first body to form an inclined angle with the first body.

2. The handheld electronic data processing device of claim 1, wherein the first body has a first keypad and a second keypad, which are operated in different directions.

3. The handheld electronic data processing device of claim 2, wherein the first keypad is a QWERTY keypad.

4. The handheld electronic data processing device of claim 2, wherein the first keypad is a phone keypad.

5. The handheld electronic data processing device of claim 2, wherein the first body is rectangular which has a long side defined as a longitudinal axis and a short side defined as a transverse axis, by which the first keypad is operated in a direction corresponding to the longitudinal axis, and the second keypad is operated in a direction corresponding to the transverse axis.

6. The handheld electronic data processing device of claim 1, wherein the first hinge is a one-way hinge.

7. The handheld electronic data processing device of claim 1, wherein the second hinge is a biaxial hinge.

8. The handheld electronic data processing device of claim 1, wherein the display screen is a touch screen to receive input signals through touch operations.

9. The handheld electronic data processing device of claim 1, wherein the first body has an audio input port on a lateral side.

10. The handheld electronic data processing device of claim 1, wherein the second body has an audio output port abutting an edge of the display screen.

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